No.



8200189

### HHIE UNIKHED SHAVIES OF AMIERICA

TO MILTOWHOM THESE PRESENTS SHALL COME;
HUSSET Seed Co., Inc.

Withereas, there has been presented to the

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen years from the date of this grant, subject to the payment of the required fees and periodic replenishment of viable basic seed of the variety in a public repository as provided by LAW, the right to extude others from selling the variety, or offering it for sale, or reproducing it, importing it, or exporting it, or using it in producing a hybrid or different ty therefrom, to the extent provided by the Plant Variety Protection Act 1542, as amended, 7 u.s.c. 2321 et seq.)

WATERMELON

'Bush Jubilee'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 21st day of July in

the year of our Lord one thousand nine hundred and eighty-three.

Secretary of Agriculture

Allest.

Renneth H. Eva

Plant Variety Protection Office Grain Division

Agricultural Marketing Service

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, MEAT, GRAIN & SEED DIVISION  APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE			FOF	FORM APPROVED: OMB NO.0581-005  No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C.)	
			may catio		
	ctions on reverse)	·	553).		
1. NAME OF APPLICANT(S)  MUSSER SEED CO., INC.  2. TEMPORARY DESIGNATION 82-4052		13	3. VARIETY NAME BUSH JUBILEE JJH 11383		
4. ADDRESS (Street and No. or R.F.D. No., City	v State and Zin Cadal	E BHONE (Include area code)	<del>                                     </del>	FOR OFFICIAL USE ONLY	
P.O. BOX 1406	y, State, and Zip Code)	5. PHONE (Michael area code)	PVP	O NUMBER	
351 SO. PARK AVE. W. TWIN FALLS, ID 83301 USA		208-734-2377	1	8200189	
6. GENUS AND SPECIES NAME	7. FAMILY NAI		<u> </u>	DATE	
CITRULLUS LANATUS	CUCUR	BITACEAE	FILING	9/28/82 TIME 2:30 A.M. © P.M.	
8. KIND NAME	9.	DATE OF DETERMINATION		AMOUNT FOR FILING	
WATERMELON	09/01/81		RECEIVED	\$ 500.00 DATE 9/28/82	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation partnership, association, etc.)  CORPORATION		EES RE	AMOUNT FOR CERTIFICATE \$ 250.00		
			-	6/7/83	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12.	DATE OF INCORPORATION		
IDAHO  13. NAME AND ADDRESS OF APPLICANT RE PAUL H. YORTY	EPRESENATIVE(S), IF	ANY, TO SERVE IN THIS APPL	ICATION	AND RÉCEIVE ALL PAPERS	
P.O. BOX 1406 TWIN FALLS, ID 83301 USA	TEL.	203-733-0077			
14. CHECK APPROPRIATE BOX FOR EACH A	ATTACHMENT SUBMIT	TTED .			
Exhibit A, Origin and Breeding History Section 52 of the Plant Variety Protect		c. Exhibit C, Objective from Plant Variety		tion of the Variety (Request form n Office.)	
b. Exhibit B, Novelty Statement		d. Exhibit D, Addition	al Descri	ption of the Variety	
15. DOES THE APPLICANT(S) SPECIFY THAT SEED? (See Section 83(a) of the Plant Varie		ETY BE SOLD BY VARIETY NA Yes (If "Yes," answ		_	
16. DOES THE APPLICANT(S) SPECIFY THAT LIMITED AS TO NUMBER OF GENERATION		17. IF "YES" TO ITEM 16 BEYOND BREEDER S		CLASSES OF PRODUCTION	
Yes X No  18. DID THE APPLICANT(S) FILE FOR PROT	ECTION OF THE VAR	Foundation		legistered Certified	
		, ., ., ., ., ., ., ., ., ., ., ., ., .,		Yes (If "Yes," give name of countries and dates)	
		•		No No	
19. HAVE RIGHTS BEEN GRANTED IN THE U	U.S. OR OTHER COUN	TRIES?		Yes (If "Yes," give name of countries and dates)	
	9.1			No No	
20. The applicant(s) declare(s) that a viable plenished upon request in accordance w			ed with		
The undersigned applicant(s) is (are) the distinct, uniform, and stable as required Variety Protection Act.					
Applicant(s) is (are) informed that false	representation herei	n can jeopardize protection an	d result	in penalties.	
SIGNATURE OF APPLICANT	1 -11 0	V +	C	PATE	
PAUL H. YORTY / 00	rul H.	lorly		09/23/82	
SIGNATURE OF APPLICANT	<del>- 0</del>		-	1	

FORM LMGS-470 (9-81) (Edition of 1-78 is obsolete)

#### INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

#### Item

- Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- If "Yes" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
  - See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

GPO 890-69





## Musser Seed Co., Inc. TWIN FALLS, IDAHO

351 SOUTH PARK AVENUE WEST 83301

SANTA MARIA, CALIF. P. O. BOX 527 706 SOUTH OAKLEY AVENUE 93456

CALDWELL, IDAHO P. O. BOX 787 1403 CHICAGO STREET 83605

(805) 928-2518

(208) 734-2377

(208) 459-8243

8200189

Bush Jubike

The breeding work to develop this variety, was begun May 3, 1977. Jubilee was crossed with Sugar Bush and then backcrossed 6 times to Jubilee. Selection for dwarf plant character and Jubilee fruit type was made in each backcross F<sub>2</sub> generation. Three generations were grown per year in most years. From the  $\mathrm{BC}_{6}\mathrm{F}_{2}$  generation, 120 dwarf segregants were grown for the initial seed increase (dwarf is homozygous recessive so these plants were all pure). All fruits were typical of Jubilee as expected. The only variants observed were those typical of Jubilee such as shortened fruits due see adderdom dated to crowded plant conditions. All fruits were definitely cylindrical as expected and none were round. 12/7/82

EXHIBIT B

This variety is distinctly different from Jubilee because plants are dwarf with dense foliage, leaves are deeper green, seeds are smaller and flesh is finer. Plant size is 3 to 4 feet in diameter compared to 12 to 15 feet for Jubilee. Foliage is dense and internodes are very short. Leaves are deeper green and have more indentations in the major leaf lobes than Jubilee, which gives them a wavy or frilled appearance. Plants are quite similar to Sugar Bush but somewhat larger. Seeds are only about half as large as Jubilee.

Flesh is finer grained and appears deeper red

than Jubilee.

dates 12/7/42

September 23, 1982

PAUL H. YORTY

Paul H. Jorty



## Musser Seed Co., Inc.

TWIN FALLS, IDAHO 351 SOUTH PARK AVENUE WEST 83301

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CALDWELL, IDAHO P. O. BOX 787 1403 CHICAGO STREET 83605

December 7, 1982

Mr. Joseph J. Higgins Examiner, Plant Variety Protection Office U.S.D.A. Agricultural Marketing Service National Agricultural Library Building Beltsville, Maryland 20705

Dear Mr. Higgins:

Subject: Additional information on watermelon application 8200189

('82-4052') requested in October 25, 1982 letter.

#### EXHIBIT A - Additional Information

As previously stated, 120 plants were grown for the initial seed increase of 82-4052. The "variants" mentioned (shortened fruits) were the result of crowded plants. This was confirmed by separate plantings for yield comparisons which had normal fruit shape. fore, the variation was environmental and entirely normal under the circumstances. I apologize for confusing this variation with genetic variation which was requested under section 14a(3) on the application form. Genetic variants were not observed, either in the plants, fruits, or seeds.

Evidence for uniformity and stability of 82-4052 is based on genetic information, which was confirmed by growing plants from a dwarf segregant that was self-pollinated 2 times. The dwarf plant type of Sugar Bush, which was used to incorporate the dwarf plant type into Jubilee, results from the stable homozygous recessive genetic condition. The heterozygous genetic condition results from the cross of the vining Jubilee X a dwarf plant, and always produces tall plants as expected. As confirmation of stability, a dwarf segregant was self-pollinated two consecutive times. The 25 plants grown from the resulting seed were all dwarf with the fruit type and seed characteristics as described in the patent application.

#### EXHIBIT B - Additional Information

Variety 82-4052 resembles Jubilee more closely than any other variety. From a genetic viewpoint, this variety is virtually identical to Jubilee except for the incorporation of the dwarf gene which is also responsible for more dense, deeper green foliage; finer, deeper red flesh; and smaller seeds. However, I also compared 82-4052 to Sugar Bush since its' plant size and form more closely resembles Sugar Bush than Jubilee.



## Musser Seed Co., Inc.

TWIN FALLS, IDAHO P. O. BOX 1406 351 SOUTH PARK AVENUE WEST 83301

SANTA MARIA, CALIF. P. O. BOX 527 706 SOUTH OAKLEY AVENUE 93456

CALDWELL, IDAHO P. O. BOX 787 1403 CHICAGO STREET 83605

{805} 928-2518

(208) 734-237

(208) 459-8243

The plant size of 3 to 4 feet in diameter for 82-4052, compared to 12 to 15 feet for Jubilee was based on the measurement of maximum plant spread of a 10 plant average. In 1982, this averaged 117 cm for 82-4052 compared to 435 cm for Jubilee and 96 cm for Sugar Bush.

Seed size measurements have been made so that differences can be expressed numerically. The average seed size is based on 20 seeds and the results are as follows:

	82-4052		Jubilee
Seed length (mm)	10.9	· · · · · · · · · · · · · · · · · · ·	13.8
Seed width (mm)	6.1		7.7
wt of 1000 seeds (g)	) 77		96

The name of this variety should be determined sometime in January 1983 and it will be provided as soon as possible.

BUSH

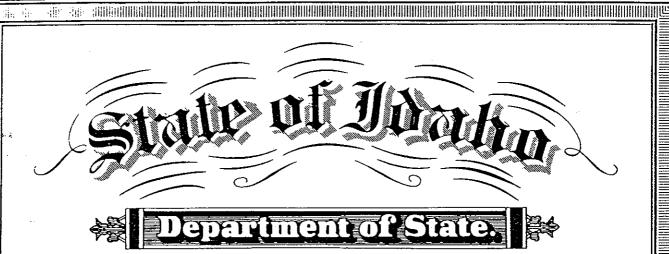
Ju Di lee

Sincerely,

Paul Yorty

Research Geneticist

DV .moc



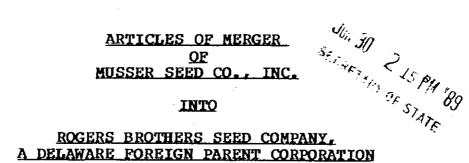
#### CERTIFICATE OF MERGER OR CONSOLIDATION

I. PETE T. CENARRUSA, Secretary of State of the State of Idaho hereby certify that
duplicate originals of Articles of
MUSSER SEED CO., INC., an Idaho corporation,
intoROGERS BROTHERS SEED COMPANY, a Delaware corporation,
duly signed and verified pursuant to the provisions of the Idaho Business Corporation Act, have
been received in this office and are found to conform to law.
ACCORDINGLY and by virtue, of the authority vested in me by law, I issue this certificate of
, and attach hereto a duplicate original of the Articles of
Merger
Dated June 30, 1989
SECRETARY OF STATE

Corporation Clerk

#### ARTICLES OF MERGER OF MUSSER SEED CO., INC.

#### INTO



Pursuant to the provisions of Sections 30-1-75 and 30-1-77 of the Idaho Business Corporation Act, the undersigned corporation adopts the following Articles of Merger for the purpose of merging Musser Seed Co., Inc., a wholly-owned subsidiary corporation into the undersigned as the surviving corporation:

The undersigned foreign corporation is incorporated under FIRST: the laws of Delaware and the laws of such jurisdiction permit such a merger.

SECOND: The following Plan of Merger was adopted by the undersigned corporation in the manner prescribed by the laws of the jurisdiction under which it is organized.

RESOLVED, that Rogers Brothers Seed Company merge into itself its wholly-owned subsidiary, Musser Seed Co., Inc., the corporate existence of Rogers Brothers Seed Company, with all its purposes, powers and objects, shall continue unaffected and unimpaired by the merger and, as the surviving corporation, Rogers Brothers Seed Company shall succeed to all rights, assets, liabilities and obligations of Musser Seed Co., Inc.; and further

RESOLVED, that each share of common stock (\$1.00 par value) of Musser Seed Co., Inc. owned by Rogers Brothers Seed Company, such shares being all of the issued and outstanding shares of Musser Seed Co., Inc., shall be cancelled on the effective date of the merger, whereupon the separate existence and corporate organization of Musser Seed Co., Inc. shall cease; and further

RESOLVED, that the effective date of the merger shall be June 30, 1989; and further

RESOLVED, that the foregoing resolutions shall constitute an Agreement of Merger for the purpose of Section 258 of the Delaware Corporation Law and the appropriate officers of Rogers Brothers Seed Company be, and they hereby are, directed to make, execute and acknowledge a certificate of merger in accordance with such section, setting forth such Agreement of Merger, and to file the same in the office of the Secretary of the State of Delaware, and to file the same or a true copy thereof in such other offices as may be required by the Delaware Corporation Law; and further

RESOLVED, that the appropriate officers of Rogers Brothers Seed Company be, and they hereby are, directed to make, execute and acknowledge the Agreement of Merger in accordance with Section 30-1-77 of the Corporation Law of the State of Idaho, and to file the same in the office of the Secretary of the State of Idaho, and to file the same or a true copy thereof in such other offices as may be required by the Corporation Laws of the State of Idaho, and to appoint the Secretary of State of the State of Idaho as the agent of Rogers Brothers Seed Company to accept service of process in action for enforcement of any prior obligations of Musser Seed Co., Inc., and to agree that Rogers Brothers Seed Company may be sued in the State of Idaho for any prior obligation of Musser Seed Co., Inc. incurred after the merger; and further

RESOLVED, that the appropriate officers of Rogers Brothers Seed Company be, and they hereby are, authorized to take any and all further action and execute and deliver any and all further documents that may be necessary or desirable in order to carry out and effectuate fully the purposes set forth in the foregoing resolutions.

THIRD: The number of outstanding shares of each class of the subsidiary corporation and the number of such shares of each class owned by the surviving corporation are as follows:

Name of Subsidiary	Number of Shares Outstanding	Designation of Class	No. of Shares Owned By Surviving Corporation
Musser Seed Co., Inc.	156,519 Common Shares	Common Stock	156,519 Common Shares

FOURTH: The requirement that a copy of the plan of Merger set forth in Article Second was waived by the Corporation as sole shareholder on June 19, 1989.

PIFTH: The undersigned corporation hereby (a) agrees that it may be served with process in the State of Idaho in any proceeding for the enforcement of any obligation of the above-mentioned subsidiary corporation; and (b) irrevocably appoints the Secretary of State of Idaho as its agent to accept service of process in any such proceeding.

Dated: June 29, 1989.

ROGERS BROTHERS SEED COMPANY

William B. Albers
Its President, and

Alden E. Hill

Its Vice President of

Administration and Secretary

STATE OF IDAHO )
) SS
COUNTY OF ADA )

I, Mrs. Sharon L. Plaster, a notary public, do hereby certify that on this 29th day of June, 1989, personally appeared before me Alden E. Hill, who being by me first duly sworn, declared that he is the Vice President of Administration and Secretary of Rogers Brothers Seed Company, that he signed the foregoing document as Secretary of the corporation, and that the statements therein contained are true.

Mrs. Sharon L. Plastic Notary Public for Idaho

Residing At: Baise, Idaho

My Commission expires: 5-27-9/

STATE OF IDAHO )

SS
COUNTY OF ADA )

I, Mrs Sharon L. Plaster, a notary public, do hereby certify that on this 29th day of June, 1989, personally appeared before me William B. Albers, who being by me first duly sworn, declared that he is the President of Rogers Brothers Seed Company, that he signed the foregoing document as President of the corporation, and that the statements therein contained are true.

My, Mawn L. Plasti Notary Public for Idaho Residing at: Rain Illaho

My Commission Expires: 5-27-9/

1.

#### JNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, POULTRY, GRAIN & SEED DIVISION BELTSVILLE, MARYLAND 20705

EXHIBIT C (Watermelon)

OBJECTIVE DESCRIPTION OF VARIETY

INSTRUCTIONS: See Reverse. WATERMELON (CITRULLUS LANATU	FOR OFFICIAL USE ONLY
MUSSER SEED CO., INC.	PVPO NUMBER 8200189
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	VARIETY NAME OR TEMPORARY
P.O. BOX 1406 351 SO. PARK AVE. W.	DESIGNATION
TWIN FALLS, ID 83301 USA	(82-4052) BUSH TUBILEE
Place the appropriate number that describes the varietal character of this variety in the Place a zero in first box (e.g. 089 or 09) when number is either 99 or less of	ne boxes below.
1. TYPE:	
1 = OBLONG 2 = ROUND LARGE 3 = ROUND SMALL (icebox)	
2. AREA OF BEST ADAPTATION:	
1 = SOUTH 2 = NORTHEAST/NORTHCENTRAL 3 = SOUTHW	EST 4 = MOST AREAS
3. EMERGENCE TO ANTHESIS:	
0 0 NO. OF DAYS EARLIER THAN 2	
0 0 NO. OF DAYS LATER THAN 2 2 2 = OTHER (Specify)	JUBILEE
4. POLLINATION TO MATURITY:	and the second of the second o
0 0 NO. OF DAYS EARLIER THAN 2 1 = CHARLESTON GREY	
0 0 NO. OF DAYS LATER THAN 2 2 = OTHER (Specify)	JUBILEE
5. PLOIDY:	
1 = DIPLOID 2 = TETRAPLOID 3 = TRIPLOID	
6. PLANT	
1 Cotyledon: 1 = FLAT 2 = FOLDED 1 = MONO	ECIOUS 2 = ANDROMONOECIOUS
Number of flowers per plant at first fruit set:	NO OF MAIN STEMS
1 0 STAMINATE 0 1 PISTILLATE 0 0 PERFEC	NO. OF MAIN STEMS
7. STEM:	and the second of the second o
	AMETER AT SECOND NODE
1 = GLABROUS 2 = SCABROUS 3 = PUBESCENT	4 = BRISTLED
2 .4 CM. VINE LENGTH : NO. OF INTERNODES (At last harvest)	
8. LEAF;	
	ER THAN WIDE 2 = LENGTH-WIDTH EQUAL R THAN LONG
Dorsal Surface:	
Ventral Surface:	= LIGHT GREEN 2 = GRAY GREEN = MEDIUM GREEN 4 = DARK GREEN
9. FLOWER (At first fruit set):	
0 3 Staminate: CM. ACROSS 0 2 Perfect: CM. ACROSS	1 = LEMON YELLOW

~

10. MATURE	FRUIT:		
3 1 = RO	OUND 2 = OVAL 3 = CYLINDRICAL	3 9 cm	M. LONG 2 1 CM. DIAMETER AT MIDSECTION
0 7 K	KG. AVERAGE WEIGHT	1 9 IN	NDEX = LENGTH + DIAMETER X 10
1	= SMOOTH 2 = SLIGHTLY GROOVED	3 = DEEPLY G	GROOVED,
2 Color:	1 = SOLID (One color) 2 = STRIPE 3 =	MOTTLE/NET	ignormation of the state of th
2 Primary	Color: 1 = YELLOW GREEN (Desert King) 2	e = LIGHT GREE	EN '(Charleston Grey) 3 = MEDIUM GREEN (Sugar Baby)
4 Seconda	ry Color: 4 = DARK GREEN (Floride Glant) 5	= OTHER(Speci	eify)
11. RIND:			
3 1 = TE	NDER 2 = BRITTLE 3 = TOUGH	1 0 TH	HICKNESS MM, BLOSSOM END
		2 <u>1</u> TI	HICKNESS MM. SIDES
12. FLESH:		-	
1 1 = CR	ISP 2 = SOFT	2 1 = 0	COARSE-FIBROUS 2 = FINE-LITTLE-FIBER
5 Color:	1 = YELLOW 2 = ORANGE 3 = PINK 4 =	RED 5 = 0	DARK RED
10 REFRAC	CTOMETER % SOLUBLE SOLIDS OF JUICE of fruit)	1 0 %	CHECK VARIETY (Specify)
	% HOLLOW HEART		% PLACENTAL % TRANSVERS CRACK
13. SEED:			
1 2 M	IM. LONG	0 7 M	M, WIDE 0 3 MM. THICK
1 7 1	NDEX + LENGTH + WIDTH X 10	7 7 GM	M. PER 1000 SEED 3 6 0 NO. SEED PER FRUIT
1 0 C	olor: 1 = WHITE 2 = WHITE-TAN TIPPED 6 = RED 7 = DARK BROWN 8 = DA	3 = WHITE-PIN	
14. DISEASE F	RESISTANCE: (0 = Untested, 1 = Susceptible, 2 =	Resistant)	
0 ANTHR	ACNOSE (Race) 0 DOWNY MILDEW	0 FUSAF	RIUM WILT 0 GUMMY STEM BLIGHT
0 SQUASH	MOSAIC 0 WATERMELON MOSAIC	0 POWD	DERY MILDEW 0 CUCUMBER MOSAIC
0 OTHER	(Specify)		
15. OTHER RE	SISTANCE: (0 = Untested, 1 = Susceptible, 2 = Re	sistant)	
0 SUNBUR	n 0 ROOT KNOT	0 OTHER	(Specify)
16. NAME A V	ARIETY THAT MOST CLOSELY RESEMBLES THAT S	UBMITTED:	
Days maturity	JUBILEE	Fruit shape	JUBILEE
Plant vigor	SUGAR BUSH	Rind color	The second secon
Fruit Size	PEACOCK PEACOCK	Flesh quality	11
, , , , , , , , , , , , , , , , , , , ,	REFE	RENCES:	

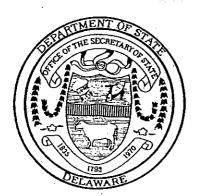
- 1. Frey, K. J. 1966. Plant Breeding Symposium. 1 ed. Iowa State University Press.
- 2. Ware, G. W. and McCollum, J. P. 1968. Producing Vegetable Crops. Interstate Printers & Publishers, Inc. Danville, Illinois.
- 3. Whitaker, T. W. and Davis, G. N. 1962. Cucurbits. Interscience Publishers, Inc. New York.
- 4. Nickerson's or any recognized color fan should be used to determine the plant colors of the described variety.

## state of Belaware



## Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THAT "ROGERS BROTHERS SEED COMPANY", FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS CORPORATE TITLE TO "ROGERS NK SEED CO. , ON THE TWENTY-SIXTH DAY OF DECEMBER, A.D. 1990, AT 10:01 O'CLOCK A.M.



Michael Harkins, Secretary of State

AUTHENTICATION: M. Magnific

DATE: \_ 10/08/1991

AMENDED
STATEMENT AND DESIGNATION
BY
FOREIGN CORPORATION

ROGERS NK SEED CO.
, a corporation
organized and existing under the laws of <u>Delaware</u> and which is presently qualified for the transaction of intrastate business in the State of California, makes the following statements and/or designation:
That the name of the corporation has been changed to that hereinabove set forth
and that the name relinquished at the time of such change was
ROGERS BROTHERS SEED COMPANY
ROGERS NK SEED CO. (Name of Corporation)
(Signature of corporate officer)
William B. Albers, President (Typed name and title of officer signing)

#### **INSTRUCTIONS:**

- 1. If this Amended Statement shows a change of corporate name, there must be attached to this Amended Statement a certificate of an authorized public official of the state or place of incorporation, that such change of name was made in accordance with the laws of that state or place.
- 2. For filing this Amended Statement there is a fee of \$15.00.

## State of Delaware

### Office of the Secretary of State

PAGE 1

I, WILLIAM T. QUILLEN, SERCRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THAT THE SAID "ROGERS NK SEED CO.", FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS NAME TO "ROGERS SEED CO.", THE FIFTH DAY OF MAY, A.D. 1994, AT 9 O'CLOCK A.M.



William T. Quillen, Secretary of State

AUTHENTICATION: 712

7120759

DATE:

05-16-94

0810041 8320

944080001

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 09:00 AM 05/05/1994 944080001 - 810041

#### CERTIFICATE OF AMENDMENT

**OF** 

## CERTIFICATE OF INCORPORATION OF ROGERS NK SEED CO.

Adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware

EFFECTIVE DATE: June 1, 1994

We, Willem van Overschot, President, and Richard B. Geller, Secretary, of Rogers NK Seed Co., a corporation existing under the laws of the State of Delaware, do hereby certify as follows:

FIRST: The Certificate of Incorporation of the corporation was filed on 2/27/75.

SECOND: The Certificate of Incorporation of said corporation has been amended as follows:

By striking out the whole of Article I thereof as it now exists and inserting in lieu and instead thereof, a new Article I, reading as follows:

#### ARTICLE I

#### Name

The name of the Corporation is ROGERS SEED CO.

THIRD: Such amendment has been duly adopted in accordance with the provisions of the General Corporation of Law of the State of Delaware, by the unanimous written consent of all of the stockholders entitled to vote in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

FOURTH: See attached Written Consent of Sole Shareholder and Board of Directors' Resolution.

IN WITNESS WHEREOF, we have signed this certificate this 13 day of 2001, 1994.

Willem van Overschot, President

Richard B. Geller, Secretary

#### ROGERS NK SEED CO.

#### WRITTEN CONSENT OF SOLE SHAREHOLDER

SANDOZ CORPORATION, owner of all of the issued and outstanding shares of ROGERS NK SEED CO., hereby consents, pursuant to Section 228 of the Delaware General Corporation Law, to the adoption of the following resolution as and for the act of the shareholder:

RESOLVED, that SANDOZ CORPORATION, as sole shareholder, approves the amendment to Article I of the Certificate of Incorporation of ROGERS NK SEED CO., changing its name to ROGERS SEED CO.

Dated: 1994

Heinz P. Imhof, Chief Executive Officer Sandoz Corporation

#### ROGERS NK SEED CO.

#### RESOLUTION

RESOLVED, that according to Section 242 of the General Corporation Law of the State of Delaware, that Article I of the Certificate of Incorporation be amended, effective June 1, 1994, to read as follows: The name of the Corporation is ROGERS SEED CO.; and, further,

RESOLVED, that the appropriate officers of Rogers NK Seed Co. be, and they hereby are, authorized to take any and all further action and execute and deliver any and all further documents that may be necessary or desirable in order to carry out and effectuate fully the purposes set forth in the foregoing resolution.

ADOPTED UNANIMOUSLY BY THE BOARD MARCH 31, 1994

Richard B. Geller, Secretary

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 09:00 AM 06/25/1997 971211767 - 0829320

# CERTIFICATE OF MERGER OF ROGERS SEED CO. INTO NOVARTIS SEEDS, INC.

The undersigned corporation organized and existing under and by virtue of the General Corporation Law of Delaware,

#### DOES HEREBY CERTIFY:

FIRST: That the name and state of incorporation of each on the constituent corporations of the merger is as follows:

NAME

STATE OF INCORPORATION

Novartis Seeds, Inc. Rogers Seed Co.

Delaware Delaware

SECOND: That an Agreement and Plan of Merger between the parties to the merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the requirements of section 251 of the General Corporation Law of Delaware

THIRD: That the name of the surviving corporation is Novartis Seeds, Inc.

**EQURTH:** That the Certificate of Incorporation of Novartis Seeds, Inc., a Delaware corporation which will survive the merger, shall be the Certificate of Incorporation of the surviving corporation.

EIETH: That the executed Agreement and Plan of Merger is on file at the principal place of business of the surviving corporation, the address of which is 7500 Olson Memorial Highway, Golden Valley, MN 55427.

SIXTH That a copy of the Agreement and Plan of Merger will be furnished by the surviving corporation, on request and without cost, to any stockholder of any constituent corporation.

SEVENTH: That this Certificate of Merger shall be effective on July 1, 1997.

Dated June 23 , 1997

**NOVARTIS SEEDS, INC** 

Name: Edward C. Resler

Title: Vice President & General Counsel